Sequence Listing:

Applicant: Quality Wheat CRC Limited

Title of the Invention: Detection of preharvest sprouting in cereal grains

Number of SEQ ID NOs: 5

Software: PatentIn Ver. 2.1

SEQ ID NO: 1

Length: 15

Type: PRT

Organism: Triticum aestivum

Sequence: 1

Ile Asp Arg Leu Val Ser Ile Arg Thr Arg Gly Gln Ile His Ser
1   5   10   15

SEQ ID NO: 2

Length: 10

Type: PRT

Organism: Triticum aestivum

Sequence: 2

Cys Arg Asp Asp Arg Pro Tyr Ala Asp Gly
1   5   10

SEQ ID NO: 3

Length: 10

Type: PRT

Organism: Triticum aestivum

Sequence: 3

Val Asn Trp Val Asn Lys Val Gly Gly Ser
　1　　　　　　　　5　　　　　　　　　10

SEQ ID NO: 4

Length: 425

Type: PRT

Organism: Triticum aestivum

Sequence: 4

Met Ala Ser Lys His Leu Ser Leu Phe Leu Val Leu Leu Gly Leu Ser
　1　　　　　　　　5　　　　　　　　10　　　　　　　　15

Ala Ser Leu Ala Ser Gly Gln Val Leu Phe Gln Gly Phe Asn Trp Glu
　　　　　　　20　　　　　　　　25　　　　　　　　30

Ser Trp Lys His Asn Gly Gly Trp Tyr Asn Phe Leu Met Gly Lys Val
　　　　　　　35　　　　　　　　40　　　　　　　　45

Asp Asp Ile Ala Ala Ala Gly Val Thr His Val Trp Leu Pro Pro Ala
　　　　50　　　　　　　　55　　　　　　　　60

Ser Gln Ser Val Ser Glu Gln Gly Tyr Met Pro Gly Arg Leu Tyr Asp
　65　　　　　　　　70　　　　　　　　75　　　　　　　　80

Leu Asp Ala Ser Lys Tyr Gly Asn Lys Ala Gln Leu Lys Ser Leu Ile
　　　　　　　85　　　　　　　　90　　　　　　　　95

Gly Ala Leu His Gly Lys Gly Val Lys Ala Ile Ala Asp Ile Val Ile
　　　　　　　100　　　　　　　　105　　　　　　　　110

Asn His Arg Thr Ala Glu Arg Lys Asp Gly Arg Gly Ile Tyr Cys Ile
        115   120   125

Phe Glu Gly Gly Thr Pro Asp Ala Arg Leu Asp Trp Gly Pro His Met
        130   135   140

Ile Cys Arg Asp Asp Arg Pro Tyr Ala Asp Gly Thr Gly Asn Pro Asp
145   150   155   160

Thr Gly Ala Asp Phe Gly Ala Ala Pro Asp Ile Asp His Leu Asn Pro
                165   170   175

Arg Val Gln Lys Glu Leu Val Glu Leu Leu Asn Trp Leu Arg Thr Asp
            180   185   190

Ile Gly Phe Asp Gly Trp Arg Phe Asp Phe Ala Lys Gly Tyr Ser Ala
            195   200   205

Asp Val Ala Lys Ile Tyr Val Asp Arg Ser Glu Ala Ser Phe Ala Val
        210   215   220

Ala Glu Ile Trp Thr Ser Leu Ala Tyr Gly Gly Asp Gly Lys Pro Asn
225   230   235   240

Leu Asn Gln Asp Pro His Arg Gln Glu Leu Val Asn Trp Val Asn Lys
                245   250   255

Val Gly Gly Ser Gly Pro Gly Thr Thr Phe Asp Phe Thr Thr Lys Gly
            260   265   270

Ile Leu Asn Val Ala Val Glu Gly Glu Leu Trp Arg Leu Arg Gly Thr
        275   280   285

Asp Gly Lys Ala Pro Gly Met Ile Gly Trp Trp Pro Ala Lys Ala Val
        290   295   300

```
Thr Phe Val Asp Asn His Asp Thr Gly Ser Thr Gln His Met Trp Pro
305             310             315             320


Phe Pro Ser Asp Arg Val Met Gln Gly Tyr Ala Tyr Ile Leu Thr His
            325             330             335


Pro Gly Pro Pro Cys Ile Phe Tyr Asp His Phe Phe Asp Trp Gly Leu
            340             345             350


Lys Glu Glu Ile Asp Arg Leu Val Ser Ile Arg Thr Arg Gln Gly Ile
        355             360             365


His Ser Glu Ser Lys Leu Gln Ile Ile Glu Ala Asp Ala Asp Leu Tyr
        370             375             380


Leu Ala Glu Ile Asp Gly Lys Val Ile Val Lys Leu Gly Pro Arg Tyr
385             390             395             400


Asp Val Gly His Leu Ile Pro Gly Gly Leu Lys Val Ala Ala His Gly
            405             410             415


Lys Asp Tyr Ala Ile Trp Glu Lys Ile
            420             425
```

SEQ ID NO: 5

Length: 10

Type: PRT

Organism: Triticum aestivum

Sequence: 5

```
Lys Val Gly Gly Ser Gly Pro Gly Thr Thr
1               5               10
```

3

SEQUENCE LISTING

<110> Applicant: Quality Wheat CRC Limited

<120> Title of the Invention: Detection of preharvest sprouting in cereal grains

<140> US 09/830,876

<141> 2001-05-02

<160> Number of SEQ ID Nos: 5

<170> Software: PatentIn Ver. 2.1

<210> SEQ ID NO: 1
<211> Length: 15
<212> Type: PRT
<213> Organism: Triticum aestivum

<400> Sequence: 1

```
Ile Asp Arg Leu Val Ser Ile Arg Thr Arg Gly Gln Ile His Ser
1               5                  10                  15
```

<210> SEQ ID NO: 2
<211> Length: 10
<212> Type: PRT
<213> Organism: Triticum aestivum

<400> Sequence: 2

```
Cys Arg Asp Asp Arg Pro Tyr Ala Asp Gly
1               5                  10
```

SEQ ID NO: 3
Length: 10
Type: PRT
Organism: Triticum aestivum

Sequence: 3

```
Val Asn Trp Val Asn Lys Val Gly Gly Ser
1               5                  10
```

SEQ ID NO: 4
Length: 425
Type: PRT
Organism: Triticum aestivum

Sequence: 4

```
Met Ala Ser Lys His Leu Ser Leu Phe Leu Val Leu Leu Gly Leu Ser
1               5                  10                  15

Ala Ser Leu Ala Ser Gly Gln Val Leu Phe Gln Gly Phe Asn Trp Glu
            20                  25                  30

Ser Trp Lys His Asn Gly Gly Trp Tyr Asn Phe Leu Met Gly Lys Val
```

see pp 1-3

Please follow above example in subsequent sequences

```
              35                    40                    45

Asp Asp Ile Ala Ala Ala Gly Val Thr His Val Trp Leu Pro Pro Ala
        50              55              60

Ser Gln Ser Val Ser Glu Gln Gly Tyr Met Pro Gly Arg Leu Tyr Asp
    65              70              75                  80

Leu Asp Ala Ser Lys Tyr Gly Asn Lys Ala Gln Leu Lys Ser Leu Ile
                85              90                  95

Gly Ala Leu His Gly Lys Gly Val Lys Ala Ile Ala Asp Ile Val Ile
            100             105             110

Asn His Arg Thr Ala Glu Arg Lys Asp Gly Arg Gly Ile Tyr Cys Ile
        115             120             125

Phe Glu Gly Gly Thr Pro Asp Ala Arg Leu Asp Trp Gly Pro His Met
    130             135             140

Ile Cys Arg Asp Asp Arg Pro Tyr Ala Asp Gly Thr Gly Asn Pro Asp
145             150             155             160

Thr Gly Ala Asp Phe Gly Ala Ala Pro Asp Ile Asp His Leu Asn Pro
            165             170             175

Arg Val Gln Lys Glu Leu Val Glu Leu Leu Asn Trp Leu Arg Thr Asp
        180             185             190

Ile Gly Phe Asp Gly Trp Arg Phe Asp Phe Ala Lys Gly Tyr Ser Ala
        195             200             205

Asp Val Ala Lys Ile Tyr Val Asp Arg Ser Glu Ala Ser Phe Ala Val
    210             215             220

Ala Glu Ile Trp Thr Ser Leu Ala Tyr Gly Gly Asp Gly Lys Pro Asn
225             230             235             240

Leu Asn Gln Asp Pro His Arg Gln Glu Leu Val Asn Trp Val Asn Lys
            245             250             255

Val Gly Gly Ser Gly Pro Gly Thr Thr Phe Asp Phe Thr Thr Lys Gly
        260             265             270

Ile Leu Asn Val Ala Val Glu Gly Glu Leu Trp Arg Leu Arg Gly Thr
        275             280             285

Asp Gly Lys Ala Pro Gly Met Ile Gly Trp Trp Pro Ala Lys Ala Val
        290             295             300

Thr Phe Val Asp Asn His Asp Thr Gly Ser Thr Gln His Met Trp Pro
305             310             315             320

Phe Pro Ser Asp Arg Val Met Gln Gly Tyr Ala Tyr Ile Leu Thr His
            325             330             335

Pro Gly Pro Pro Cys Ile Phe Tyr Asp His Phe Phe Asp Trp Gly Leu
```

```
              340              345                   350
Lys Glu Glu Ile Asp Arg Leu Val Ser Ile Arg Thr Arg Gln Gly Ile
         355              360              365

His Ser Glu Ser Lys Leu Gln Ile Ile Glu Ala Asp Ala Asp Leu Tyr
    370              375              380

Leu Ala Glu Ile Asp Gly Lys Val Ile Val Lys Leu Gly Pro Arg Tyr
385              390              395                        400

Asp Val Gly His Leu Ile Pro Gly Gly Leu Lys Val Ala Ala His Gly
              405              410              415

Lys Asp Tyr Ala Ile Trp Glu Lys Ile
              420              425
```

SEQ ID NO: 5
Length: 10
Type: PRT
Organism: Triticum aestivum

Sequence: 5
```
Lys Val Gly Gly Ser Gly Pro Gly Thr Thr
1             5                   10
```

3) delete

FYI **Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.**

Please consult sample Sequence Listing (attached) for valid format

```
<110>        Smith, John;  Smithgene Inc.

<120>        Example of a Sequence Listing

<130>        01-00001

<140>        PCT/EP98/00001
<141>        1998-12-31

<150>        US 08/999,999
<151>        1997-10-15

<160>        4

<170>        PatentIn version 2.0

<210>        1
<211>        389
<212>        DNA
<213>        Paramecium sp.

<220>
<221>        CDS
<222>        (279)...(389)

<300>
<301>        Doe, Richard
<302>        Isolation and Characterization of a Gene Encoding a
             Protease from Paramecium sp.
<303>        Journal of Genes
<304>        1
<305>        4
<306>        1-7
<307>        1988-06-31
<308>        123456
<309>        1988-06-31

<400>        1
agctgtagtc   attcctgtgt   cctcttctct   ctgggcttct   caccctgcta   atcagatctc        60

agggagagtg   tcttgaccct   cctctgcctt   tgcagcttca   caggcaggca   ggcaggcagc       120

tgatgtggca   attgctggca   gtgccacagg   cttttcagcc   aggcttaggg   tgggttccgc       180

cgcggcgcgg   cggcccctct   cgcgctcctc   tcgcgcctct   ctctcgctct   cctctcgctc       240
```

Appendix 3, page 2

ggacctgatt	aggtgagcag	gaggaggggg	cagttagc		atg	gtt	tca	atg	ttc	agc	296
					Met 1	Val	Ser	Met	Phe 5	Ser	

ttg	tct	ttc	aaa	tgg	cct	gga	ttt	tgt	ttg	ttt	gtt	tgt	ttg	ttc	caa	344
Leu	Ser	Phe	Lys 10	Trp	Pro	Gly	Phe	Cys 15	Leu	Phe	Val	Cys	Leu 20	Phe	Gln	

tgt	ccc	aaa	gtc	ctc	ccc	tgt	cac	tca	tca	ctg	cag	ccg	aat	ctt		389
Cys	Pro	Lys 25	Val	Leu	Pro	Cys	His 30	Ser	Ser	Leu	Gln	Pro 35	Asn	Leu		

```
<210>      2
<211>      37
<212>      PRT
<213>      Paramecium sp.
```

```
<400>      2
Met  Val  Ser  Met  Phe  Ser  Leu  Ser  Phe  Lys  Trp  Pro  Gly  Phe  Cys  Leu
1                   5                   10                       15

Phe  Val  Cys  Leu  Phe  Gln  Cys  Pro  Lys  Val  Leu  Pro  Cys  His  Ser  Ser
               20                   25                       30

Leu  Gln  Pro  Asn  Leu
          35
```

```
<210>      3
<211>      11
<212>      PRT
<213>      Artificial Sequence
```

```
<220>
<223>      Designed peptide based on size and polarity to act as a
           linker between the alpha and beta chains of Protein XYZ.
```

```
<400>      3
Met  Val  Asn  Leu  Glu  Pro  Met  His  Thr  Glu  Ile
1                   5                   10
```

```
<210>      4
<400>      4
000
```

[Annex VIII follows]

identifiers and their accompanying information as shown in the following
table. The numeric identifier shall be used only in the "Sequence
Listing." The order and presentation of the items of information in the
"Sequence Listing" shall conform to the arrangement given below. Each
item of information shall begin on a new line and shall begin with the
numeric identifier enclosed in angle brackets as shown. The submission
of those items of information designated with an "M" is mandatory. The
submission of those items of information designated with an "O" is
optional. Numeric identifiers <110> through <170> shall only be set
forth at the beginning of the "Sequence Listing." The following table
illustrates the numeric identifiers.

Numeric Identifier	Definition	Comments and Format	Mandatory (M) or Optional (O)
<110>	Applicant	Preferably max. of 10 names; one name per line; preferable format: Surname, Other Names and/or Initials	M
<120>	Title of Invention		M
<130>	File Reference	Personal file reference	M when filed prior to assignment of appl. number
<140>	Current Application Number	Specify as: US 07/999,999 or PCT/US96/99999	M, if available
<141>	Current Filing Date	Specify as: yyyy-mm-dd	M, if available
<150>	Prior Application Number	Specify as: US 07/999,999 or PCT/US96/99999	M, if applicable include priority documents under 35 USC 119 and 120
<151>	Prior Application Filing Date	Specify as: yyyy-mm-dd	M, if applicable
<160>	Number of SEQ ID NOs	Count includes total number of SEQ ID NOs	M
<170>	Software	Name of software used to create the Sequence Listing	O
<210>	SEQ ID NO:#:	Response shall be an integer representing the SEQ ID NO shown	M
<211>	Length	Respond with an integer expressing the number of bases or amino acid residues	M

<212>	Type	Whether presented sequence molecule is DNA, RNA, or PRT (protein). If a nucleotide sequence contains both DNA and RNA fragments, the type shall be "DNA." In addition, the combined DNA/RNA molecule shall be further described in the <220> to <223> feature section.	M
<213>	Organism	Scientific name, i.e. Genus/species, Unknown or Artificial Sequence. In addition, the "Unknown" or "Artificial Sequence" organisms shall be further described in the <220> to <223> feature section.	M
<220>	Feature	Leave blank after <220>. <221-223> provide for a description of points of biological significance in the sequence.	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence; if ORGANISM is "Artificial Sequence" or "Unknown"; if molecule is combined DNA/RNA.
<221>	Name/Key	Provide appropriate identifier for feature, preferably from WIPO Standard ST.25 (1998), Appendix 2, Tables 5 and 6	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence
<222>	Location	Specify location within sequence; where appropriate state number of first and last bases/amino acids	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified

		in feature	base was used in a sequence
<223>	Other Infor-mation	Other relevant information; four lines maximum	M, under the fol-lowing conditions: if "n," "Xaa," or a modified or un-usual L-amino acid or modified base was used in a sequence; if ORGANISM is "Artificial Sequence" or "Unknown"; if molecule is com-bined DNA/RNA.
<300>	Publication Information	Leave blank after <300>	O
<301>	Authors	Preferably max of ten named authors of publi-cation; specify one name per line; preferable format: Surname, Other Names and/or Initials	O
<302>	Title		O
<303>	Journal		O
<304>	Volume		O
<305>	Issue		O
<306>	Pages		O
<307>	Date	Journal date on which data published; specify as yyyy-mm-dd, MMM-yyyy or Season-yyyy	O
<308>	Database Accession Number	Accession number assigned by data-base including database name	O
<309>	Database Entry Date	Date of entry in database; specify as yyyy-mm-dd or MMM-yyyy	O
<310>	Patent Document Number	Document number; for patent-type citations only. Specify as, for example, US 07/999,999	O